**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION 5**

**IN THE MATTER OF**:

Empire Hard Chrome
1615 South Kostner Avenue
Chicago, Illinois, 60623

**ATTENTION:**

Steve Wallin
President
steve@empirehardchrome.com

**Request to Provide Information Pursuant to the Clean Air Act**

The U.S. Environmental Protection Agency is requiring Empire Hard Chrome to submit certain information about the facility at 1615 South Kostner Avenue, Chicago, Illinois ("Empire Hard Chrome" or "the Facility"). Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B and Appendix C specify the information that you must submit. You must send this information to us according to the schedules in Appendices B and C.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Enforcement and Compliance Assurance Division, Region 5.

Empire Hard Chrome owns and operates an emission source at the Facility at 1615 South Kostner Avenue, Chicago, Illinois. We are requesting this information to determine whether your emission source is complying with 40 C.F.R. Part 63 Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

At this time, EPA Region 5 is not accepting any hard-copy document deliveries. If possible, we ask Empire Hard Chrome to upload all required information to the secured web-link shared with you at the time you received this request. If you did not receive a web-link, or if you are having technical difficulties, you must contact Emma Leeds at leeds.emma@epa.gov to make arrangements to submit your response.

Empire Hard Chrome must submit all required information under an authorized signature with the following certification:

> I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1519.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice. You should be aware, moreover, that pursuant to Section 114(c) of the CAA and 40 C.F.R. § 2.301(a) and (f), emissions data, standards and limitations are not entitled to confidential treatment, including the emissions data generated during the stack test.

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq*., because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Empire Hard Chrome to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Emma Leeds at leeds.emma@epa.gov.

MICHAEL HARRIS

Digitally signed by MICHAEL HARRIS
Date: 2022.09.28 13:56:39 -05'00'

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

## Appendix A

When providing the information requested in Appendices B and C, use the following instructions and definitions.

### Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B and Appendix C.

2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.

3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.

4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.

5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.

6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

### Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.

2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide submission to the secure web-link provided by EPA. When such submissions are made, please notify Emma Leeds at leeds.emma@epa.gov.

4. Provide a table of contents of all electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number.

5. Please submit documents claimed as confidential business information (CBI) in separate file folders apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI.

6. Certify that the attached files have been scanned for viruses and indicate what program was used.

**Definitions**

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq*., or 40 C.F.R. Part 63 Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

1. "Facility" means the Empire Hard Chrome Facility located at 1615 S Kostner Ave, Chicago, Illinois.

## Appendix B

## Information You Are Required to Submit to EPA: Performance Testing

Empire Hard Chrome must submit the following information pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a) for its Facility located at 1615 South Kostner Ave, Chicago, Illinois. Empire Hard Chrome must submit a test protocol, conduct emission testing, and submit all other information requested in accordance with the schedule specified below:

| | |
|---|---|
| Submit testing protocol(s) | Within 30 days of receipt of this request |
| Notification of intent to test | Not less than 14 days before testing |
| Complete testing | Within 90 days of receipt of this request |
| Submit testing report | Within 30 days of completion of testing |

1. Notify EPA within 3 days in advance of any maintenance work, repairs, replacements, or improvements to the hard chromium electroplating tanks and/or air pollution controls. In the notification, provide the reason for the planned work, the proposed scope, a list of the components proposed to be replaced, modified, or adjusted, whether an outside firm was retained to perform the work, and the anticipated cost. Provide this notification to Emma Leeds at leeds.emma@epa.gov.

2. Within thirty (30) calendar days of receipt of this request, Empire Hard Chrome must submit to EPA for approval a test protocol for determining total chromium emissions in the exhaust gas stream discharged to the atmosphere from all four (4) composite mesh pad systems, and for establishing site-specific pressure drop ranges for compliance. The test protocol must include the following information:

    a. General Information:
        i. Name, contact person, telephone number and e-mail address for the testing company contracted to conduct the test;
        ii. Fully labeled process flow diagrams of all tanks, composite mesh-pad systems, stacks, and sampling ports involved in testing;
        iii. Schematic diagrams for each composite mesh-pad system, including the location of all ducted pickup points, canopies, hoods, etc, and the associated emission unit(s).

    b. Operating Conditions:
        i. Identification of the range of process or operating rates for each emissions unit;
        ii. Description of how air pollution control and process equipment will be monitored during testing;
        iii. Description and explanation of how testing will be conducted at a production rate and under operating conditions that are consistent

with representative conditions as described in EPA Stack Testing Guidance[1].

1. Identify the capacity and production rate of each emission unit at which the maximum total chromium emissions are generated and that you plan to achieve during the test. Include documentation and supporting evidence for these conditions. EPA expects Empire Hard Chrome to operate under these conditions during the tests.
2. Identify how the air pollution controls will be operated during the test and how that is consistent with the EPA Stack Testing Guidance.

iv. Description of how pressure drop across the composite mesh-pad systems will be established, following the guidelines in 40 CFR §63.344(d)(5), as well as any other operating parameters that you plan to monitor during testing.

c. Methods:

i. List the methods and guidelines to be used to determine and demonstrate an accurate chromium emission rate, establish an accurate pressure drop range, and demonstrate the capture efficiency of the composite mesh-pad systems, including, but not limited to;

1. Method 306 or Method 306A, Determination of Chromium Emissions from Decorative and Hard Chromium Electroplating and Anodizing Operations, to determine the total chromium emissions from the hard chromium electroplating tanks and chromium anodizing tanks;
2. Method 1 (or 1A) to determine sample and velocity traverses;
3. Method 2 to determine velocity and volumetric flow rate;
4. 40 C.F.R. § 63.344(c)(1), including, but not limited to:
    a. At least 120-minute sampling time for each run;
    b. At least 1.70 dry standard cubic meter (60 dry standard cubic feet) sampling volume for each run;
5. 40 C.F.R. § 63.344(d)(5) to determine pressure drop across the add-on air pollution control devices;

ii. Summary of your reasons, if applicable, for proposing to use any alternative or equivalent methods.

3. EPA must approve the test protocol in writing prior to implementation. Empire Hard Chrome shall make any adjustments to the testing protocol required by the EPA.

[1] Tests should be performed under conditions that represent the range of combined process and control measure conditions under which the Facility expects to operate (regardless of the frequency of the conditions); and, that are likely to most challenge the emissions control measures of the Facility with regard to meeting the applicable emission standards, but without creating an unsafe condition. Clean Air Act National Container Stack Testing Guidance, § VII.5 (April 27, 2009), available at https://www.epa.gov/sites/default/files/2013-09/documents/stacktesting_1.pdf

4. At least fourteen (14) calendar days prior to the planned emission test date under this request, submit an "intent to test" notification to the EPA (leeds.emma@epa.gov and R5airenforcement@epa.gov) and IEPA. EPA may approve a shorter timeframe if it does not interfere with EPA witnessing the test.

5. Within ninety (90) calendar days of receipt of this request, Empire Hard Chrome must perform testing at the Facility in accordance with the approved test protocol submitted per Request 2.

6. Within thirty (30) calendar days of completing the test, submit a test report containing the results of all tests runs, including any partial runs. The report must include:
    a. A process description;
    b. Sampling procedure descriptions, including:
        i. Sampling port locations and dimensioned cross sections showing all flow disturbances including elbows, dampers, fans, constrictions, and collection equipment;
        ii. Sampling point and location descriptions;
        iii. Sampling train descriptions;
        iv. Description of the sampling and analytical procedures and any modifications to standard procedures.
    c. Test results, including;
        i. Emission results, expressed in milligrams per dry standard cubic meter (mg/dscm) and milligrams per hour (mg/hr), and any calculations performed to determine the emission results;
        ii. Pressure drop measured for each scrubber following requirements in 40 CFR §63.344(d)(5), and a description of how the regulation was followed. Include pressure drop field notes in the appendix;
        iii. Average ventilation rate for each scrubber for three test runs as determined at the outlet by means of Method 306 or 306A.
    d. Quality assurance procedures and results;
    e. Records of operating conditions during the test taken in 15-minute intervals or shorter, including amps and volts for each rectifier, pressure drop across scrubbers, and temperature in each tank;
    f. Verification of and explanation of how tests occurred during maximum total chromium emission generation conditions, in accordance with EPA Stack Testing Guidance;
    g. Raw data sheets for field sampling and field and laboratory analyses;
    h. Documentation of all calculations, including, but not limited to, the cross sectional area of each inlet duct (i.e., uptakes from each hood).
    i. Any other information required by the test methods.

## Appendix C

## Information You Are Required to Submit to EPA: Operations

Empire Hard Chrome must submit the following information about its Facility located at 1615 South Kostner Ave, Chicago, Illinois pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a) within thirty (30) calendar days of receipt of this request.

1. A copy of the manufacturer's written specifications for installation and operation of the composite mesh-pad system(s) used at the Facility. Please provide a summary of the following information provided in the manufacturer's specifications:
    a. Recommendation for composite mesh-pad washdown frequency and performance; and
    b. Recommendation for composite mesh-pad life-span and replacement frequency.

2. Manufacturer's written specifications for the installation, operation, and calibration of the differential pressure measurement devices used to measure pressure drop across the composite med-pad systems.

3. In an editable electronic spreadsheet, for Tanks B-1, B-2, B-7, A-5, A-6, and A-7, identify each tank receptable, rectifier, anode, heat exchanger equipment, circulation pump, and air agitation system with a unique label based off the tank, and provide the following information for each component:
    a. The date (month, day, year) that each component listed above was last replaced. If never replaced, provide the date of installation;
    b. The make and model of each component; and,
    c. The fixed capital cost of each component purchased after February 8, 2012 in dollars; and,
    d. The manufacturer's written specifications for each component.

4. Provide the following information and records related to the tanks and composite mesh-pad systems from January 1, 2018 to the date of receipt of this request:
    a. The operation and maintenance plan(s),
    b. Inspection records for the composite-mesh pad systems and any monitoring equipment. The records can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection;
    c. Records of maintenance performed on the tanks, the composite mesh-pad systems, and monitoring equipment, including routine housekeeping practices such as mesh-pad washdowns;
    d. Records pertaining to occurrence, duration, and cause (if known) of each malfunction of process, composite mesh-pad system, and monitoring equipment, and the subsequent actions taken to minimize emissions and return to normal operation;

e. The total process operating time of the hard chrome electroplating tanks and a narrative of the typical daily operating time for each tank; and,
f. Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month and year, if maintained.

5. Describe how the Facility minimizes spills of bath solution that result from dragout as specified in 40 C.F.R. § 63.342 Table 2.

6. For the rectifiers at the Facility, provide the following information:
    a. A description of the maximum rectifier capacity for each rectifier in amps, and a description of which rectifier(s) power which hard chrome electroplating tank(s);
    b. The maximum cumulative rectifier capacity, and whether the Facility is a large or small hard chromium electroplating facility, as defined by 40 C.F.R Subpart N (A large, hard chromium electroplating facility has a maximum cumulative potential rectifier capacity great than or equal to 60 million ampere-hours per year).